

ADDITIONAL NOTES ON THE GENUS LIPPIA. X

Harold N. Moldenke

LIPPIA PALMERI S. Wats.

Additional bibliography: Moldenke, Phytologia 39: 266--267. 1978.

Moran & Reveal refer to this species as "occasional". On the other hand, Dress and his associates call it "abundant". It has been found growing at 10--600 m. altitude, flowering from September to December and February to May, fruiting in February, November, and December.

The corollas are said to have been "white" on Moran 20085 and on Moran & Reveal 20085, "yellow" on Hastings & Turner 69-34, "pinkish" on Moran 4068, "pale-lavender" on Carter & Moran 4381 and Wiggins 15399, "lavender to white, turning pink" on Wiggins 14432, "pale-lavender to white, pink in age" on Wiggins 14443, and "pale-yellow, later turning brown" on Stevens 1519.

The Carter, Alexander, & Kellogg 2476 and Kenoyer 2482, distributed as typical L. palmeri, seem better regarded as var. spicata Rose, while Kaiser s.n. is Aloysia sonorensis Moldenke and M. E. Jones 23237 is Lantana hispida H.B.K. (not L. scorta Moldenke as previously reported).

Additional citations: MEXICO: Baja California: Carter & Ferris 4044 (Au--271014, N); Carter & Moran 5381 (N, Sd--68623); Hastings & Turner 64-272 (Sd--61247, Tu--158345); R. Moran 20085 (W--2796937); Moran & Reveal 20085 (Sd--92458); D. M. Porter 122 (Au--216377, Tu--148902); I. L. Wiggins 5539, in part (Se--22095, Se--220927, Tu--177030), 14432 (Au--190210, Se--208912, Tu--169785), 14443 (Au--190212, Se--208910), 14610 (Tu--169464), 15399 (Tu--180992), 15461 (Au--200406, Tu--177533), 15588 (Se--208882); Wiggins, Carter, & Ernst 319 (W--2522114); Wiggins & Ernst 576 (W--2522166). Sonora: Astorga, Edmundson, Moser, & Felger 17030 (Sd--92082); Dress, Moser, Moser, & Felger 20523 (Sd--92152); Gentry 4685 (Tu--98600); Hastings & Turner 64-54 (Tu--151726), 69-34 (Tu--172001), 72-56 (Tu--184701); Shantz & McGinnies 39 (Tu--12779); W. D. Stevens 1519 (Id). GULF OF CALIFORNIA ISLANDS: Carmen: R. V. Moran 9138 (Sd--66197). Coronado: R. V. Moran 9096 (Bl--240139, Sd--66198). Monserrate: R. V. Moran 9297 (N, Sd--66195, W--2571594A). San José: R. V. Moran 9410 (Sd--66194). San Marcos: R. V. Moran 8966 (Sd--66196). Tiburon: R. V. Moran 4068 (Ba, Sd--50248); F. Torres s.n. [Marzo de 1962] (Ip, Ip). Turners: R. V. Moran 13035 (Sd--63034).

LIPPIA PALMERI var. SPICATA Rose

Additional bibliography: Moldenke, Phytologia 14: 412. 1967; Moldenke 391

denke, *Résumé Suppl.* 17: 2. 1968; Moldenke, *Fifth Summ.* 1: 72 & 77 (1971) and 2: 563 & 893. 1971.

Recent collectors describe this plant as a perennial with many slender branches, to 1.5 m. tall, and have found it growing along washes, at the dry edges of paved highways, and in broad arroyos of *Larrea* and *Krameria* with scattered *Pachycereus*, at 25 m. altitude, flowering in January, March, and April. Wiggins speaks of the "flowers in small stout spikes", Moran found it "occasional along arroyos". The corollas are said to have been "lavender-white to deep lavender-rose" on Carter & al. 2476.

It is very likely that this taxon should be reduced to mere form rank.

Additional citations: MEXICO: Baja California: Carter, Alexander, & Kellogg 2476 (Sd—44573, Se—175979); I. L. Wiggins 5539, in part (Au—238407), 44614 (Au—190211, Se—208911). GULF OF CALIFORNIA ISLANDS: Tiburon: R. V. Moran 8743 (Sd—66199).

LIPPIA PEARSONI Moldenke

Additional bibliography: Friedrich-Holzhammer in *Merxm., Meeuse, & Meikle, Prodr. Südw. Afr.* 122: 8. 1967; Moldenke, *Phytologia* 14: 413. 1967; Moldenke, *Résumé Suppl.* 15: 21. 1967; Moldenke, *Fifth Summ.* 1: 244 (1971) and 2: 563 & 893. 1971; Moldenke, *Phytologia* 39: 105. 1978.

Recent collectors describe this plant as a succulent bush or shrub, 0.8—1.5 m. tall, strongly aromatic, with small flowers, and have found it growing "in rocky conditions", flowering in January and May, at 1800 feet altitude. Bayliss refers to it as "local". Borges encountered it "junta a uma linha de água". The corollas are said to have been "white" on Bayliss BS.4161, Borges 182, and Kuntze s.n. [12/3/94].

Friedrich-Holzhammer (1967) distinguishes L. pearsoni from L. wilmsii as follows: L. pearsoni -- "Jüngere Stengelsteile und Blätter nur spärlich mit sehr kurzen anliegenden Haare bedeckt und ausserdem stark drüsig; Blätter ganzrandig bis sehr schwach und undeutlich gesägt. Köpfchen meist zu 4—6 an den Stengelknoten, bis ca. 15 mm lang gestielt, kugelig bis eiförmig, meist unter 10 mm lang. Tragblätter breit eiförmig, kurz zugespitzt, bis ca. 3 mm lang."

L. wilmsii -- "Jüngere Stengelsteile und Blätter ziemlich dicht mit längeren, abstehenden, steifen Haare bedeckt, ausserdem drüsig. Blätter deutlich gesägt. Köpfchen meist zu 2—4 an den Stengelknoten, ca. 20—50 mm lang gestielt, eiförmig-länglich, ca. 10—15 mm lang. Tragblätter schmal-eiförmig, lang zugespitzt."

He reduces L. volkii Moldenke to synonymy under L. pearsoni, while the Pretoria botanists reduce it to L. wilmsii H. H. W. Pearson. He records the vernacular name, "kao", and cites De Winter & Leistner 5285 & 5526 and Volk s.n. — all of which collections I still regard as L. volkii Moldenke.

Material of L. pearsoni has been misidentified and distributed

in some herbaria as L. asperifolia Rich., L. javanica (Burm. f.) Spreng., and Lantana salvifolia Jacq.

Additional citations: ANGOLA: Huila: Borges 182 (Mu). Mossamedes: E. J. Mendes 61 (Z). SOUTH AFRICA: Cape Province: Bayliss BS.4161 (Bm, N, W--2564393). Natal: Kuntze s.n. [Kranz Kloof, 12/3/94] (N).

LIPPIA PEARSONI var. SESSILIS Moldenke, Phytologia 12: 343. 1965.

Additional bibliography: Moldenke, Phytologia 14: 413. 1967; Moldenke, Résumé Suppl. 15: 21. 1967; Moldenke, Fifth Summ. 1: 244 (1971) and 2: 563 & 893. 1971.

LIPPIA PEDUNCULATA H. H. W. Pearson

Additional bibliography: Moldenke, Phytologia 13: 364. 1966; Moldenke, Fifth Summ. 1: 257 (1971) and 2: 893. 1971.

The Meebold 12829, distributed as L. pedunculata, actually is L. wilmsii H. H. W. Pearson.

LIPPIA PEDUNCULOSA Hayek

Additional bibliography: Moldenke, Phytologia 12: 344--345, 1965; Moldenke, Fifth Summ. 1: 156 (1971) and 2: 563 & 893. 1971.

LIPPIA PENDULA Rusby

Additional bibliography: R. C. Foster, Contrib. Gray Herb. 184: 170. 1958; Angely, Fl. Anal. Paran., ed. 1, 576. 1965; Moldenke, Phytologia 13: 364. 1966; Moldenke, Fifth Summ. 1: 156 & 183 (1971) and 2: 893. 1971; Troncoso, Darwiniana 18: 337 & 410. 1974.

Anderson and his associates found this plant "sprawling in semi-open part of forest, in area of gallery forest and adjoining 'campo sujo'", at an altitude of 1350 m., flowering in February. The corollas on their collection is said to have been "white with yellow eye".

Additional citations: BRAZIL: Minas Gerais: Anderson, Stieber, & Kirkbride 35183 (Ld, N, W--2709299).

LIPPIA PETIOLATA Moldenke, Phytologia 28: 192--193. 1974.

Bibliography: Moldenke, Phytologia 28: 192--193 & 439 (1974) and 39: 162. 1978.

Irwin and his associates describe this plant as an ascending subshrub, to 30 cm. tall, the corollas lavender-purple, the tube yellow and eventually red-violet, and encountered it in campos and gallery forest margins, at 1250 m. altitude, flowering and fruiting in February, and their collection was misidentified and distributed as L. lacunosa Mart. & Schau.

Citations: BRAZIL: Minas Gerais: Irwin, Maxwell, & Wasshausen 20509 (Ac--isotype, N--type).

LIPPIA PHAEOCEPHALA Briq.

Additional & emended bibliography: Briq. in Chod. & Hassl., Pl. Hassler. 2: 494--495. 1904; Burkart, Excerpt. Bot. A.5: 586. 1962;

Moldenke, *Phytologia* 12: 346—347. 1965; Moldenke, *Fifth Summ.* 1: 186 & 189 (1971) and 2: 893. 1971; Troncoso, *Darwiniana* 18: 340 & 410. 1974.

LIPPIA PHRYXOCALYX Briq.

Additional bibliography: Burkart, *Excerpt. Bot. A.5*: 586. 1962; Moldenke, *Phytologia* 13: 364. 1966; Moldenke, *Fifth Summ.* 1: 156 & 186 (1971) and 2: 893. 1971; Troncoso, *Darwiniana* 18: 339 & 410. 1974; Moldenke, *Phytologia* 39: 164--165. 1978.

Troncoso (1961, 1974) makes this the type species of a Section *Pseudoaloysia* Troncoso, which she characterizes as "Cabezuelas subespiciformes laxas, breves, alargándose después de la antesis, axilares, de inserción supra-axilar. Brácteas lanceoladas, coloradas. Flores brevemente pediceladas. Arbustos."

The Eitens describe the species as a shrub, 2 m. tall, with light-violet flowers, and found it in bloom "on mountainsides with vegetation apparently true caatinga", flowering in July.

Material has been misidentified and distributed in some herbaria as *L. lasiocalycina* var. *sainthilairei* Moldenke, which it closely resembles.

Additional citations: BRAZIL: Piauí: Eiten & Eiten 4506 (N), 4914 (N).

LIPPIA PLICATA J. G. Baker

Additional & emended bibliography: J. G. Baker in *Thiselt.-Dyer*, *Fl. Trop. Afr.* 5: 278 & 281. 1900; Moldenke, *Phytologia* 14: 413. 1967; Richards & Morony, *Check List Fl. Mbala* 238. 1969; Teixeira, *Bol. Soc. Brot.* 44, ser. 2, xi. 1970; Moldenke, *Fifth Summ.* 1: 230, 237, 244, 246, & 250 (1971) and 2: 549, 566, & 893. 1971; Moldenke, *Phytologia* 31: 388. 1975.

Recent collectors describe this plant as an aromatic many-stemmed herb, bush, subshrub, or shrub, 0.8—1.8 m. tall, with rough leaves and small flowers, and have found it growing on steppes, open sandy grassy spaces, sandy soil of low bush country, at the edge of water, among tall or rough grasses, and at the edges of *Brachystegia* woodland in low-lying ground, at altitudes of 800—2200 m., flowering in February, April, May, and October. The corollas are said to have been "white" on Moreno 159, 232, 278, & 386 and on Tyrer 916 and "whitish" on Reekmans 1193, while Abercorn says "flowers white, yellow stem red" (whatever that may mean). Tyrer describes its distribution as "occasional", while Moreno found it "abundant in black soil near rivers", used medicinally "para fazer chá para se dores do peito", and reports the common name "ondembi".

Baker (1900) distinguishes this species from the other species known to him from tropical Africa as follows:

1. Bracts orbicular, obtuse.

2. Peduncles very short. *L. oatesii*.

2a. Peduncles long. *L. radula*.

1a. Bracts cuspidate.

3. Leaves small.

4. Leaves orbicular or obovate.....L. somalensis.4a. Leaves oblong, rugose.....L. javanica.3a. Leaves larger, oblong or oblong-lanceolate, scarcely rugose.....L. abyssinica.

1b. Bracts acuminate.

5. Leaves opposite.....L. ukambensis.5a. Leaves ternate.....L. burtonii.1c. Bracts acute.....L. plicata.

He cites only Carson 81 from "British Central Africa". Richards & Morony (1969) cite Richards 214, 737, 1093, 1632, 15039, & 22251 from Mbala. They also list Richards 9603 as "Lippia sp. or hybrid indet. near L. plicata Bak. (?L. javanica ex plicata)" from rough ground at Kawimbe, 5800 feet altitude.

Material of L. plicata has been distributed in some herbaria as Lantana rugosa Thunb., Lantana sp., and Labiatae. On the other hand, the Quarré 2960, distributed as typical L. plicata, seems better placed as var. parvifolia (Moldenke) Moldenke.

Additional citations: ZAIRE: Liben 1433 (Mu). BURUNDI: Reekmans 1193 (E--2209164, E--2209181). ANGOLA: Huambo: Moreno 159 (Mu), 232 (Mu), 278 (Mu), 386 (Mu). Province undetermined: Burger s.n. [Sandando] (Mu). ZAMBIA: Abercorn 22251 (E--1873221). MALAWI: Tyrer 916 (N).

LIPPIA PLICATA var. ACUMINATA (Moldenke) Moldenke

Additional bibliography: Moldenke, Phytologia 14: 413. 1967; Moldenke, Fifth Summ. 1: 230, 244, & 252 (1971) and 2: 566 & 893. 1971.

Additional citations: MOZAMBIQUE: Niassa: Rui Monteiro 35 (Z).

LIPPIA PLICATA var. PARVIFOLIA (Moldenke) Moldenke

Additional bibliography: Moldenke, Phytologia 14: 413. 1967; Moldenke, Fifth Summ. 1: 230 (1971) and 2: 566 & 893. 1971.

Material of this variety has been distributed in some herbaria as typical L. plicata J. G. Baker or as L. strobiliformis Moldenke.

Additional citations: ZAIRE: Quarré 2960 (N).

LIPPIA POHLIANA Schau.

Additional bibliography: Buek, Gen. Spec. Syn. Candoll. 3: 266. 1858; Moldenke, Phytologia 14: 414. 1967; Moldenke, Fifth Summ. 1: 156 (1971) and 2: 560 & 892. 1971; Moldenke, Phytologia 31: 385. 1975; Hocking, Excerpt. Bot. A.28: 170. 1976; Moldenke, Phytologia 39: 78 & 259. 1978.

Recent collectors describe this plant as an erect brittle shrub or subshrub, 0.7--1 m. tall, with many stems from an underground xylopodium, and found it growing in rocky cerrado, on "outcrops in areas of cerrado with outcrops bordering gallery forest".

[to be continued]